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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,890	02/27/2002	Narayanan Venkitaraman	CM05034H	2114
24273	7590	05/17/2007		
MOTOROLA, INC INTELLECTUAL PROPERTY SECTION LAW DEPT 8000 WEST SUNRISE BLVD FT LAUDERDAL, FL 33322			EXAMINER HARPER, KEVIN C	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/083,890	Applicant(s) VENKITARAMAN ET AL.	
	Examiner Kevin Harper	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --.

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16, 19, 20 and 24-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16, 19, 20 and 24-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

Applicant's arguments filed February 7, 2007 have been fully considered but they are not persuasive.

1. Applicant argued that Agrawal does not disclose maintaining a binding update while connected to a home network. However, in the process of roaming, Agrawal notes that a mobile unit maintains a binding list with correspondent nodes it is currently communicating with so that it may send binding updates when it roams to a new network (col. 3, lines 57-62). It would appear unreasonable for the mobile unit to abandon its binding list only because it has roamed from a foreign network to its home network, because the same list would be used to inform correspondent nodes that it is currently communicating with that it has traveled from the home network to the previous foreign network or a new foreign network.
2. Applicant argued that Agrawal does not provide motivation to maintain a binding update list when at its home network. However, the mobile unit maintains a list for nodes it is currently communicating with (col. 3, lines 57-62), which allows less processing at the home agent (col. 3, lines 60-62).
3. Applicant argued that Agrawal in view of Sorenson and Malki does not provide maintaining a binding update list while in a home network. However, Agrawal provides a teaching and motivation for a mobile unit to maintain a binding update list while residing in its home network as noted in paragraph 1 above. Examiner notes that the claims do not require sending binding updates while in a home network, but only maintaining a binding update list while in the home network. As such, the rejection only uses the Malki reference to provide a teaching of sending a binding update when changing routers to a foreign network in the communication system.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 41 is rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art (specification, page 2, lines 25-29).

4. Applicant's admitted prior art discloses a method of operation of a mobile node within a communication system supporting mobile IP, wherein the mobile node is operable to connect to a network infrastructure (page 2, lines 25-29). The method comprises determining correspondent nodes that have received a binding update, where the determination is made prior to receiving any packets from the correspondent node (page 2, lines 27-29; note: prospectively corresponding), and sending a binding update to the correspondent nodes to inform the correspondent nodes of the new care-of-address (page 2, line 26).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 16, 19-20 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US 6,992,995) in view of Sorensen (US 2002/0061009).

5. Regarding claims 16, 19-20 and 24-29, Agrawal discloses maintaining by a mobile node a binding update list of correspondent nodes for which the mobile node is communicating (col. 3, lines 57-62). The binding update includes care-of-address of the mobile node. However, Agrawal

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does not specifically disclose that the binding update list is maintained when at the home network of the mobile node. Although, Agrawal notes that the list is used to notify correspondent nodes when the location of the mobile node changes (col. 3, lines 57-62) and that the list is for current correspondent nodes. Therefore, it would have been obvious to one skilled in the art at the time the invention was made for a mobile node to maintain a binding update list at a home network in the invention of Agrawal in order to provide location changes to respective correspondent nodes when the mobile nodes leaves the home network (col. 3, lines 57-62).

6. Further, Agrawal does not disclose a mobile gateway router. Sorensen discloses an ad hoc mobile gateway router (fig. 2; para 24, lines 4-7). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have mobility for a mobile gateway router in the invention of Agrawal in order to provide movable network interfaces or gateways such as within a car or bus as is known in the art.

Claims 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal in view of Sorensen as applied to claim 16 above, and further in view of Malki (US 2001/0046223).

7. Regarding claims 30-40, Agrawal does not disclose detaching from the mobile gateway router, attaching to a second mobile gateway router and sending binding updates. Malki discloses choosing a new mobility point and sending binding updates (fig. 7, steps 710, 720 and 760) to correspondent nodes of a binding update list (para. 32, lines 18-19). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to self-register the mobility of a mobile node with a home agent in the invention of Agrawal in order to enhance mobility registration by controlling network messages by the mobile node (Malki, para. 54, last nine lines) and provide for free movement within a communications system (para. 4, lines 1-5).

Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Agrawal et al. (US 6,992,995).

8. Regarding claims 42-43, Applicant's admitted prior art does not disclose maintaining a binding update list while in a home network. Agrawal discloses maintaining by a mobile node a binding update list of correspondent nodes for which the mobile node is communicating (col. 3, lines 57-62). The binding update includes care-of-address for the mobile node. However, Agrawal does not specifically disclose that the binding update list is maintained when at the home network of the mobile node. Although, Agrawal notes that the list is used to notify correspondent nodes when the location of the mobile node changes (col. 3, lines 57-62) and that the list is for current correspondent nodes. Therefore, it would have been obvious to one skilled in the art at the time the invention was made for a mobile node to maintain a binding update list at a home network in the invention of applicant's admitted prior art in order to provide location changes to respective correspondent nodes when the mobile nodes leaves the home network (Agrawal, col. 3, lines 57-62).

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Agrawal et al. (US 6,992,995), as applied to claim 43 above, and in further view of Inoue et al. (US 2002/0191576).

9. Applicant's admitted prior art in view of Agrawal does not disclose a mobile gateway router or using a care-of-address of the router. Inoue discloses using the care-of-address of a mobile router (para. 26). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use a care-of-address of a mobile gateway router in the invention of applicant's admitted prior art in view of Agrawal in order to communicate with the mobile unite after it has roamed (Inoue, para. 26).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at 571-272-2092. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is [kevin.harper@uspto.gov](mailto:kevin.harper@uspto.gov).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see [portal.uspto.gov](http://portal.uspto.gov). Should you have questions on access to

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the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Kevin C. Harper", written in a cursive style.

Kevin C. Harper

May 10, 2007